



FLAT GLASS

FLAT DRAWN WINDOW GLASS

POLISHED PLATE GLASS

SAFETY GLASS

FIGURED AND WIRE GLASS



LIBBEY-OWENS-FORD GLASS COMPANY

TOLEDO, OHIO

and

BLUE RIDGE GLASS CORPORATION

KINGSPORT, TENN.

The Company

The LIBBEY·OWENS·FORD GLASS COMPANY is the successor to the Edward Ford Plate Glass Company, the Libbey-Owens Glass Company, the National Plate Glass Co., and several smaller flat glass manufacturing concerns. The first named company was founded in 1899 by Edward Ford who was the son of Capt. J. B. Ford, the first successful manufacturer of Plate Glass in America. The Libbey-Owens Glass Company was organized in 1916 by Edward Drummond Libbey and Michael J. Owens. During his entire business career Mr. Libbey was a dominant figure in the glass manufacturing industry. To Mr. Owens' inventive genius is due many of the improvements in processes of manufacture used throughout the industry today.

The Libbey-Owens exclusive process, a development and improvement of the Colburn process of making Window Glass first introduced *flat drawn* Window Glass.

Facilities and Service

The Company owns and operates eight main factories strategically located in Toledo, Ohio, Rossford, Ohio, Lancaster, Ohio, Charleston, W. Va., Ottawa, Ill., and Shreveport, La. Leading glass jobbers, conveniently located to serve all building requirements, distribute the output of these plants. Direct factory sales offices are maintained in fourteen cities to efficiently serve the Architectural Profession.

A Complete Line

The LIBBEY·OWENS·FORD GLASS COMPANY manufactures and distributes a complete line of flat glass. This includes the highest quality Plate Glass for glazing, mirror manufacturing, furniture tops and automobiles—*flat drawn* Window Glass, heavy Sheet Glass, Greenhouse Glass, Safety Glass and the Figured and Wire Glass manufactured by the Blue Ridge Glass Corporation of Kingsport, Tenn.

LIBBEY·OWENS·FORD GLASS COMPANY

GENERAL OFFICES

TOLEDO, OHIO

SALES OFFICES

NEW YORK
BOSTON
ATLANTA

MINNEAPOLIS
CHICAGO
ST. LOUIS

PHILADELPHIA
KANSAS CITY
DETROIT

SHREVEPORT
BUFFALO
SAN FRANCISCO

SEATTLE
LOS ANGELES
CINCINNATI

SELECTING THE RIGHT GLASS

THE selection of the right glass for various glazing or decorative purposes has become a matter of growing interest and importance to all architects. Windows are indeed the eyes of a building and the glass used may either enhance or detract from beauty of line and detail. Even the general public has become interested through widespread advertising on the subject and *quality* in all types of glass is now an important factor in building construction.

The general recommendations which follow are based on current building practice and will vary according to the design and location of the building, the individual desires of architect and owner and the appropriation available.

Residences

In the vast majority of private dwellings "A" Quality Labeled Double Strength Window Glass is used. However, at present low prices, many architects are specifying either $\frac{1}{4}$ or $\frac{1}{8}$ -inch Polished Plate Glass. Not infrequently Plate Glass is used in living-room and dining-room windows with "A" Quality Labeled Window Glass in other glazing.

Picture Windows are finding a great vogue in more expensive residences, especially where the building site affords an attractive view. These large Plate Glass areas are often used in decorative bronze casements with smaller panels at the sides for easy ventilation.

Windows, such as in bathrooms or dressing rooms where the view from the outside is to be obscured, may be glazed with a figured glass as described on pages 9 to 14.

Apartment Buildings

"A" Quality Labeled Double Strength Window Glass and Polished Plate Glass are both used. In buildings where high rental rates are to prevail, Polished Plate Glass is more desirable.

Building codes, differing somewhat in various cities, usually require the use of Wire Glass in openings exposed to the hazard of fire. This type of glass is also recommended for skylights and light wells. Wire Glass is available in both clear and figured glass. See page 9 for details.

In bathroom and areaway windows where obscurity is desired a figured glass is recommended.

Hotels, Office and Bank Buildings

For the past several years Polished Plate Glass has been almost universally used in the larger, more impressive buildings.

If Plate Glass cannot be used throughout it is recommended for the first three floors and "A" Quality Labeled Double Strength Window Glass from the fourth floor up.

Even in small hotels the public rooms such as lobbies and dining rooms should be glazed with Plate Glass.

As in apartment buildings local building codes make certain requirements where fire hazard is involved. See page 9 for information on fire resisting glass.

For corridors, partitions, windows, skylights, elevator doors and other glazing where the vision is to be obscured, see page 9.

School Buildings and Hospitals

"A" Quality Labeled Double Strength Window Glass is generally used but during the present era of low prices an increasing number of architects are specifying Polished Plate Glass.

In some schools certain doors and windows, where pupils may be subjected to unusual hazard in the event of breakage, are glazed with Safety Glass or Wire Glass.

In a number of recently constructed hospitals, Safety Glass has been used in psychopathic wards and in adjacent corridors.

Department Stores

Polished Plate Glass is universally used for store fronts and is generously used throughout the building. Where the public makes free use of swinging doors, Safety Glass is recommended.

Smaller Stores

Here, also, Polished Plate Glass is universally used for store fronts and is usually used in upper floors for front windows. "A" Quality Labeled Double Strength Window Glass is recommended for other glazing. Occasionally rear or side windows, facing alleys and courts, may be glazed with either Safety Glass or Wire Glass for the protection it affords against breakage by thieves.



The Empire State Building, New York
SHREVE, LAMB & HARMON, Architects
STARRETT BROTHERS & EKEN, Builders
Glazed with L. O. F. Polished Plate Glass

The Exclusive Libbey·Owens·Ford Flat Drawn Process

THE Libbey·Owens·Ford flat drawn process, a development and improvement of the Colburn process, revolutionized the manufacture of glass when it was introduced some fifteen years ago. Although, since that time, other methods have been developed for producing high quality window glass, none of them produces a more lasting brilliance of finish than is to be found in L. O. F. glass.

L. O. F. Window Glass is comparatively non-brittle, is exceptionally easy to cut, and is free from internal strain. These advantages are gained by slow annealing in long ovens or lehrs (five or six times longer than those used in other processes). The exclusive L. O. F. continuous manufacturing process is clearly illustrated by the diagrammatical drawing shown.

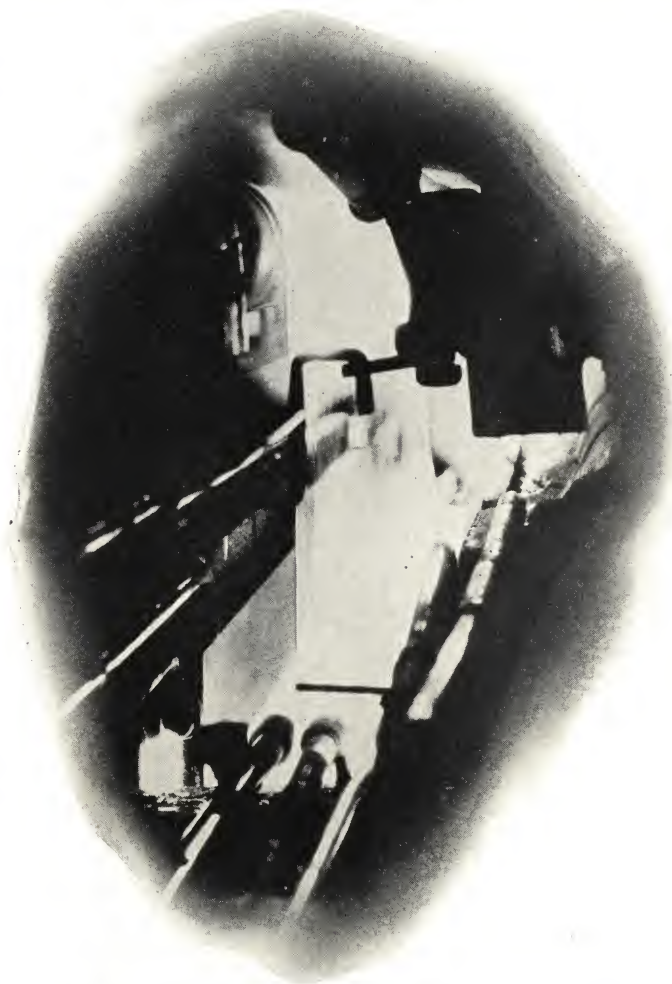
First the scientifically mixed batch is poured from the chute into a heating tank or melting furnace. Here the silica, soda ash, limestone, charcoal, cullet, and arsenic which make up the batch, are melted. The molten mass then flows into a refining chamber from which it is elevated or drawn a few inches and then passes over a bending roll, still in a semi-molten state.

As the glass is raised from the fire chamber the natural fire finish is applied to both sides of

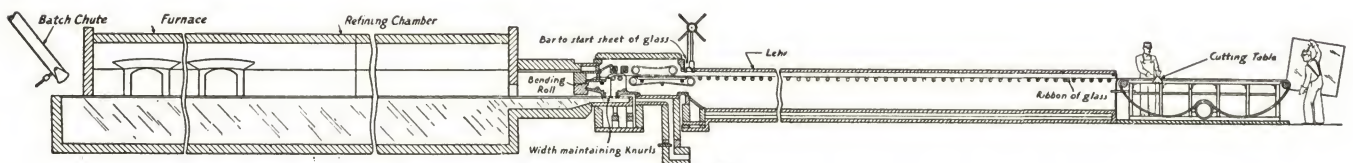
the sheet. Leaving the bending roll slowly hardening, the glass is moved horizontally, perfectly flat at all times, into the long annealing oven or lehr more than 200 feet in length. The gradual annealing under a scientifically regulated and steadily diminishing temperature tempers the glass making it free from internal strain and giving it that uniform strength and freedom from brittleness which makes L. O. F. glass so easy to cut.

Emerging from the lehr the finished sheet moves still in a horizontal position, onto a cutting table for its first inspection and cutting. Further inspection, grading and cutting to standard sizes follow. The glass which has been graded to the "A" Quality requirements is then labeled. All Window Glass is packed in wooden boxes, 50 square feet to the box, except that over the 100-inch bracket. When the glass is over 100 united inches it is packed in wooden cases, 100 square feet to the case. In packing "A" and "B" Quality Window Glass a sheet of paper is placed next to each light to protect the surface of the glass.

The very simplicity of this process is a tribute to the genius of Colburn, Libbey and Owens. Yet simple as all this appears, only after years of experiment and research was it possible to produce Window Glass of such perfection.



The Formation of the Sheet by the L. O. F. Exclusive Process



Diagrammatical Drawing Showing the Continuous Straight Line Method of Producing Window Glass by the Exclusive L. O. F. Process

TECHNICAL DATA

FLAT DRAWN WINDOW GLASS

Libbey·Owens·Ford manufactures Flat Drawn Window Glass in several different qualities and of varying thickness. Single Strength and Double Strength Window Glass is regularly supplied in two standard qualities—"A" Quality and "B" Quality. All L. O. F. Window Glass is manufactured by the exclusive Libbey·Owens·Ford continuous flat drawing process. This results in a lasting brilliance of finish, uniformity of thickness and quality unsurpassed by other processes.

Tolerance in Thickness

Libbey·Owens·Ford Flat Drawn Window Glass table of thickness standards is given below:

	Thickness, in.		Lights per in.		Average weight, oz. per sq. ft.
	Min.	Max.	Min.	Max.	
Single strength	0.080	0.100	10.5	12.0	18.5
Double strength	.111	.125	8.0	9.0	24.5

Flatness

L. O. F. Flat Drawn Window Glass is naturally flat. The exclusive process of manufacture draws the glass into a flat sheet directly from the molten state.

Glazing

Government specifications state that window glass shall be glazed with the convex side out. L. O. F. Flat Drawn Window Glass can be glazed with either side

out because it is truly *flat*—there is no convex side. This saves considerable time in glazing and minimizes breakage.

Dimensions

L. O. F. Flat Drawn Window Glass is cut to dimensions well within the allowable limits of Government Specifications—less than $\frac{1}{32}$ of an inch per $\frac{1}{8}$ inch thickness.

Packing

L. O. F. Flat Drawn Window Glass is paper packed in suitable cases that are padded with straw. Between each light of "A" and "B" Quality glass is a sheet of paper for the protection of the surface of the glass.

Labeling

Libbey·Owens·Ford originated the practice of labeling "A" Quality glass. Each light of "A" Quality Double Strength Window Glass bears the L. O. F. *blue* label, while each light of "A" Quality Single Strength Window Glass bears the L. O. F. *red* label.

Standard Specification

Flat Drawn Sheet Glass—All Flat Drawn Window Glass shall be Libbey·Owens·Ford "A" Quality Double Strength, except as otherwise noted, glass to be paper packed, and each light shall bear the Libbey·Owens·Ford label, indicating strength and quality of the glass.



The Blue Label for "A" Quality Double Strength



The Red Label for "A" Quality Single Strength



A Complete L. O. F. Window Glass Manufacturing Unit, Showing the Opening at the End of the Tank into Which the Batch Is Fed

Polished Plate Glass Manufacturing Processes and Data

THE LIBBEY·OWENS·FORD GLASS COMPANY manufactures Plate Glass by two entirely different methods.

Large sizes of glass, such as used in store fronts and very large windows, are made by the Bischeroux process. Plate Glass blanks for smaller sizes such as used in automobiles and mirrors made by the tank drawing process.

In the pot casting method the pots, molded by hand from the finest quality of clays, are thoroughly dried, aged and cured, and when ready for use are preheated to a proper temperature. They are then filled with the mineral and chemical ingredients from which plate glass is made and are carefully and scientifically heated to an extremely high temperature in gas fired melting furnaces. This is an important factor in the production of quality Plate Glass. At the proper time the pot is removed from the furnace and conveyed to the Bischeroux casting machine. The molten batch is poured through rollers onto a moving table, forming the unfinished plate glass blank. The blank then passes from the casting table through a long annealing lehr where under gradually diminishing heat the glass is carefully tempered. This precision in annealing or tempering is another important contributing factor to high quality in Plate Glass. After emerging from the lehr the blanks are given their first inspection. The glass at this point has a rough surface and is hardly transparent. It is then ready for the grinding and polishing operations.

The rough plate is firmly held in plaster on a long line of moving tables. These tables pass under a series of rotating and oscillating grinders using sand as an abrasive until the rough surface is ground down to the point where it is smooth enough to be polished. The moving table passes on under another series of rotating felt polishers where, using rouge as the polishing agent, the glass finally emerges several hours after it has entered the grinding and polishing machine with one side completely ground and polished. After further inspection the plate is mechanically lifted and turned to start again the long journey back through another grinding and polishing machine which finishes the reverse side. On emerging from this machine the plate is thoroughly washed, and then delivered to the final inspection department. Here it is graded, selected and inspected in accordance with the rigid standards of quality constantly maintained by the LIBBEY·OWENS·FORD GLASS COMPANY.

The making of rough blanks for the smaller sizes of plate glass by the continuous flat drawing process is somewhat similar to that employed in making window glass. Here surface finish of the blank is

of no importance, but flatness and careful annealing are essential. The grinding and polishing operations are identical with those employed for finishing the pot cast plate glass blanks. The grading of plate glass is a highly specialized trade. In fact it might be considered an art.

The very finest glass, which is used almost entirely in making the costliest mirrors, is known as "First Silvering Quality" and owing to the high cost of selecting this quality, it is never specified for building purposes.

The next quality is called "Second Silvering" and is often used for high grade glazing work but is seldom specified in sizes over 20 square feet.

Most of the plate glass used in glazing is known as "Glazing Quality" and the U. S. Government specifications set up definite requirements for tolerances in thickness and dimensions.

The general requirements under the U. S. Government standards for sizes and thickness, are as follows:

Size and Thickness

The standard thicknesses of plate glass shall be $\frac{1}{8}$, $\frac{3}{16}$, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$ and $1\frac{1}{2}$ inches. Sheets are available $\frac{1}{4}$ inch thick in sizes having a maximum area of 250 square feet. Glass of $\frac{1}{4}$ -inch thickness may be furnished having any desired dimension under the maximum of 126x250 inches. The standard stock thickness for glazing purposes is $\frac{1}{4}$ inch, but this may vary between $\frac{3}{8}$ and $\frac{5}{16}$ inch.

Tolerances in Thickness

The maximum and minimum thicknesses allowed shall not be more than the given thickness plus or minus one-half the difference between the standard thicknesses, although for $\frac{1}{4}$ -inch glass occasional plates as thick as $\frac{5}{16}$ inch are supplied. The general variation in thickness should not be more than $\frac{1}{32}$ inch for individual lights under 10 square feet, in thickness up to $\frac{1}{4}$ inch. The variation in lights over $\frac{1}{4}$ inch in thickness should not exceed one-half the total tolerance for that thickness.

Standard Specification Polished Plate Glass

Where polished plate glass is specified, or shown on plans, it shall be manufactured by the LIBBEY·OWENS·FORD GLASS COMPANY, and shall be of (—) quality and (—) thickness (insert quality and thickness) in accordance with U. S. Government Standards.

Additional Information

For additional technical data for polished plate glass see catalogue in this edition of the Plate Glass Manufacturers of America.



Waldorf-Astoria Hotel, New York, N. Y. Glazed Throughout with L. O. F. Polished Plate Glass and Blue Ridge Polished Wire Glass

SCHULTZE & WEAVER, Architects
THOMPSON-STARRETT Co., Builders
From a drawing by Lloyd Morgan

Polished Plate Glass for Mirrors

THE use of mirrors and silvered plate glass panels is enjoying a widespread vogue with leading architects. The constantly broadening use of silvered plate glass is especially noticeable in recent designs for theaters, retail stores and other construction of public or semi-public buildings.

In the best of the fine residences recently constructed, full-length mirrored doors in bedrooms and bathrooms are very much in evidence and in many homes mirrored bathroom walls are becoming popular. After being conspicuously absent for more than a generation the mirror over the mantel is again seen. Some of the best designers among furniture manufacturers have been quick to grasp this trend by increasing the use of large size mirrors in their creations.

While it has long been recognized that mirrors give an effect of spaciousness to a hallway or room, their use for their decorative value as a part of the architectural design is now reaching its highest development.

Libbey-Owens-Ford Polished Plate Glass for mirrors is noted for its brilliant polish and its freedom from imperfections. The careful inspection and accurate grading described on the preceding pages even exceeds the requirements of Government Standards which became effective in December of 1930.

For the guidance of the architect and owner and for the protection of the mirror manufacturer, the following standards of quality have been approved by the Mirror Manufacturers Association of America and adopted by the U. S. Bureau of Standards:

AA Quality

AA quality mirrors shall be entirely free from major defects and as nearly perfect as it is possible to manufacture them. Only well distributed, fine seed, and small faint hair lines when not grouped shall be permitted.

A Quality

The central area of mirrors of this quality shall be

free from major defects, but may contain well-scattered seed and short faint hair lines, when not grouped, and occasionally very light short finish visible only on close inspection.

The outer area, in addition to the foregoing, may contain seed and short faint scratches when not grouped.

No. 1 Quality

The central area of mirrors of this quality may contain scattered seed, faint hair lines, and light short finish.

The outer area in addition to the foregoing may contain short scratches and occasional strings not over 2 inches long.

No. 2 Quality

Mirrors of this quality may contain the following defects: Numerous scattered seed, occasional coarse seed, light reams, strings, light scratches, short finish if not torn, hair lines if not too densely grouped, and bull's eye if not visible from front inspection.

No. 3. Quality

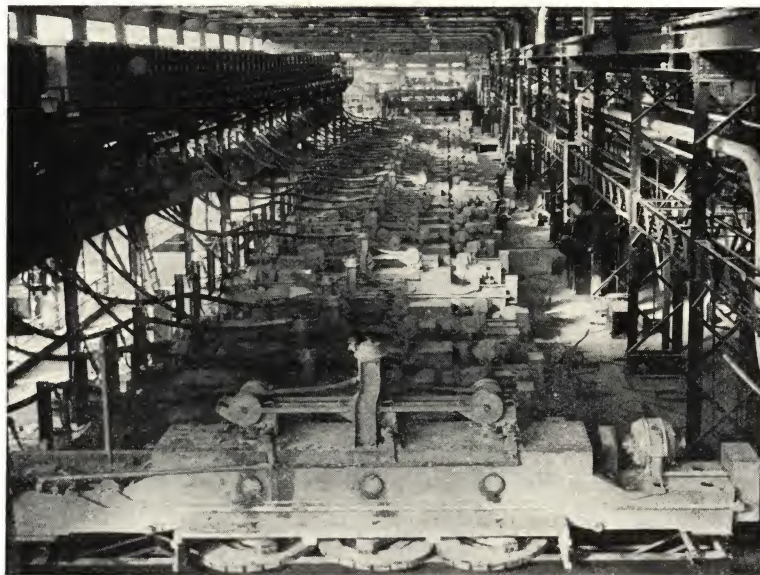
Mirrors of this quality may contain all the defects which may be found in plate glass.

Thickness

Plate glass mirrors of commercial standard qualities shall be between $\frac{3}{16}$ and $\frac{5}{16}$ of an inch thick. If specific thicknesses are ordered a variation of $\frac{1}{32}$ inch plus or minus the given thickness shall be allowed.

Silvering

All commercial standard quality mirrors shall be silvered in an approved manner and guaranteed for a period of one year from the date of manufacture unless the mirrors are subjected to unusual conditions, such as open weather, moist walls, steamed rooms, direct sunlight, or similar conditions.



Grinding and Polishing Machine at the Rossford Plant of the Libbey-Owens-Ford Glass Co.

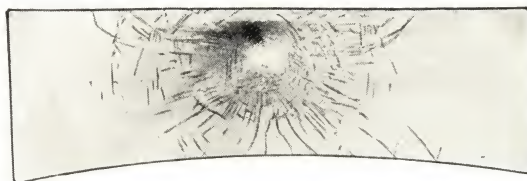
Safety Glass (Non-shatterable)

SINCE it was first used during the World War laminated non-shatterable glass, now generally known as Safety Glass, has been progressively improved until it is now used in a variety of ways. Practically all automobile, bus and taxicab manufacturers furnish it as standard or optional equipment in their products. It is widely used by the aircraft industry, by motor boat and yacht builders, and many railway coach builders are experimenting with its use.

Its application to building construction is of more recent origin, but it can be furnished both in the form of Safety Sheet Glass and Safety Plate Glass. Architects are specifying it for revolving and swinging doors, in window ventilators, and in similar installations where

the public is subjected to unusual hazard in the event of glass breakage. In several recent hospital jobs, Safety Glass has been used in the psychopathic wards and in the corridors adjoining those wards.

Libbey-Owens-Ford Safety Glass is made by an exclusive process whereby two sheets of thin glass are bonded under heat and great pressure to a center sheet of transparent pyroxylin plastic. In use, these glass sheets may of course crack or break, but they adhere so strongly to the plastic that the danger from scattering or flying pieces of glass is thereby reduced to a minimum. By the Libbey-Owens-Ford process the edges are sealed to withstand moisture seepage, to prevent separation and give long life to the product.



Under Impact the Broken Pieces of Glass Adhere to the
Center Sheet of Plastic; thus Danger from Flying
Fragments of Glass Is Reduced to an Absolute
Minimum



Harborview Hospital, Seattle, Wash.

THOMAS, GRAYNER & THOMAS, Architects

DR. W. D. WALSH, Medical Consultant

Libbey-Owens-Ford Safety Glass used in Psychopathic Wards, all other glazing
L. O. F. Double Strength "A" Quality Flat Drawn Window Glass

Blue Ridge Figured and Wire Glass

MANUFACTURED BY BLUE RIDGE GLASS CORPORATION, KINGSPORT, TENN.

Sold by LIBBEY·OWENS·FORD GLASS COMPANY, Toledo, Ohio, Through Leading Glass Jobbers

Blue Ridge Glass

Rolled Figured and Wire Glass, Polished Figured and Wire Glass, for Partitions, Doors, Transoms, Windows and Skylights.

Where to Obtain Blue Ridge Glass

Leading Glass Jobbers and Glazing Contractors carry Blue Ridge Glass in stock or can get quick shipment of any pattern, size and thickness from the factory's large supplies.

PATTERNS, THICKNESSES, SIZES AND WEIGHTS

Thickness, in.	Patterns	Maximum width, in.	Maximum length, in.	Approximate weight per sq. ft., lbs.
Rolled Figured Glass				
$\frac{1}{8}$	Industrex, Luminex, Velvex, Hammered, Ribbed, Diffusex, Pebblex, Florex, Mazex	60	132	2
$\frac{3}{16}$	Industrex, Luminex, Velvex, Hammered, Ribbed, Diffusex, Pebblex, Florex, Mazex	60	132	2½
$\frac{1}{2}$	Muralex, Transex, Prism	60	144	3¾
$\frac{3}{4}$	Industrex, Luminex, Velvex, Hammered, Ribbed, Diffusex, Pebblex, Florex, Mazex	60	144	4
Wire Glass				
$\frac{1}{4}$	Industrex, Luminex, Velvex, Hammered, Ribbed, Diffusex, Pebblex, Florex, Mazex, Muralex	60	144	4
$\frac{3}{8}$	Rough	60	144	5½
$\frac{1}{2}$	Polished	60	144	4
Polished Figured Glass				
$\frac{7}{8}$	Diffusex, Industrex, Pebblex	60	144	3¾

Blue Ridge Figured and Wire Glass is Specified by Architects Because of Its

1. Uniform quality and thickness.
2. Brilliant, sparkling appearance.
3. Attractive and efficient patterns.
4. Easily cleaned designs.
5. Light transmitting and diffusing effectiveness.
6. Wire Glass Fire Retarding Properties (approved by Underwriters' Laboratories Inc. as Number R-2129).

Suggestions to Architects

State width (horizontal measurement) first and height (vertical measurement) second, when writing the size of any kind of glass.

Wire glass is usually set with the wire running vertically, hence the first dimension given is understood to be across the wire twists (width) unless specifically shown otherwise.

Ribbed glass is generally glazed with the ribs running vertically (parallel to height).

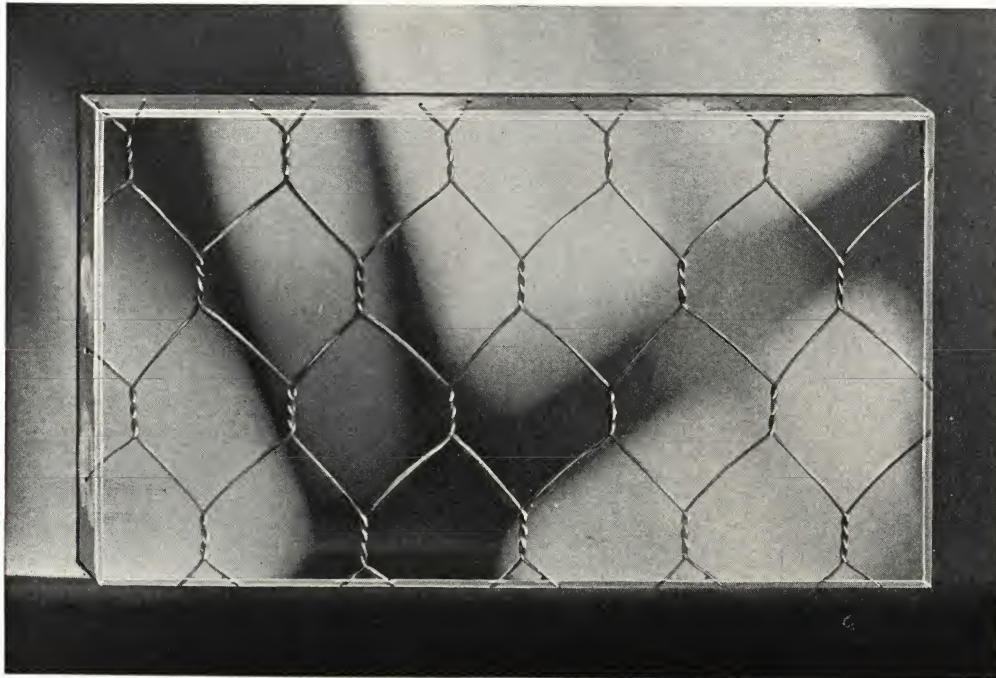
Prism glass distributes light best when prisms are set horizontally (parallel to width).

Specify kind of glass by name and give thickness and finish (see table of patterns, thicknesses, sizes and weights).

Stipulate Blue Ridge Glass Corporation as the manufacturer and insist that Blue Ridge Glass be furnished.

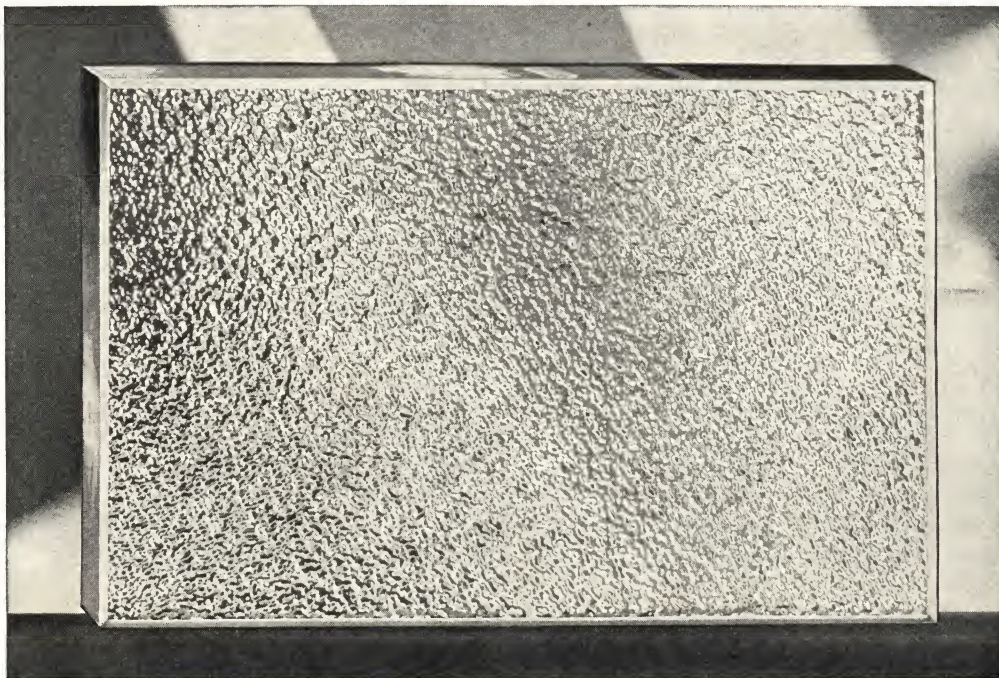
Standard Specification, Obscure and Wire Glass

Where rough or polished wire or obscure glass is specified herein, or shown on plans, it shall be (....) inch in thickness and shall be (....) pattern (specify thickness and pattern desired), and shall be manufactured by the Blue Ridge Glass Corporation.



Polished Wire Glass
(Wire Mesh Shown Actual Size)

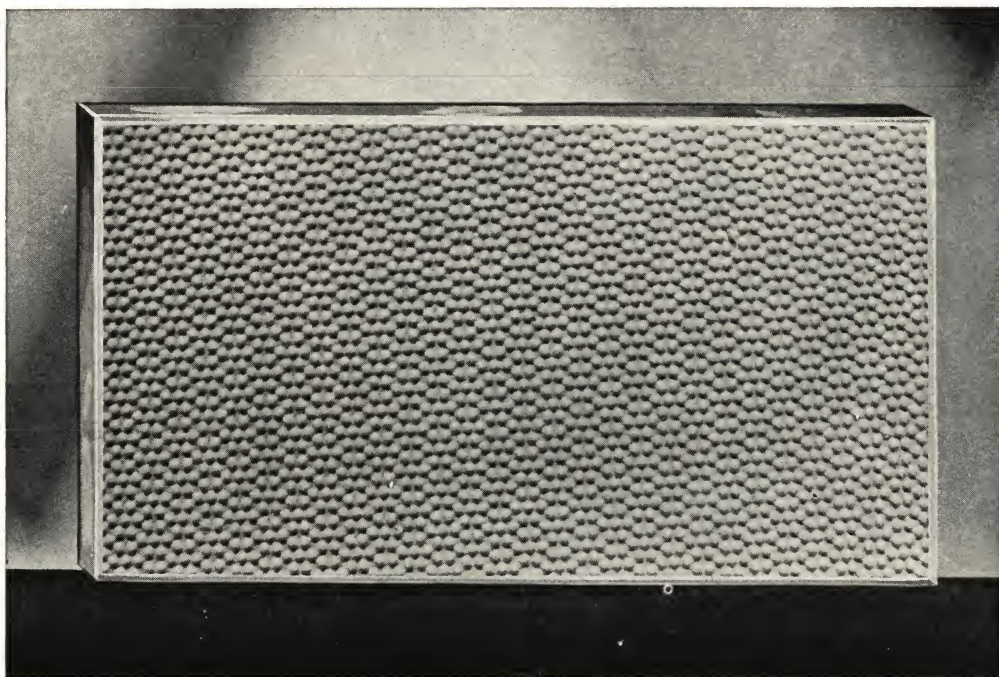
Used in all openings where clear vision and the security of non-scatterable fire retardant glass are desired. Genuine polished plate glass with wire reinforcement. Blue Ridge's outstanding quality product



Muralex Glass
(Pattern Shown Actual Size)

A new glass for partitions, doors and transoms. Its modest dignified beauty harmonizes with any style of architecture and its mechanical efficiency insures its popularity. The pattern is finely en-

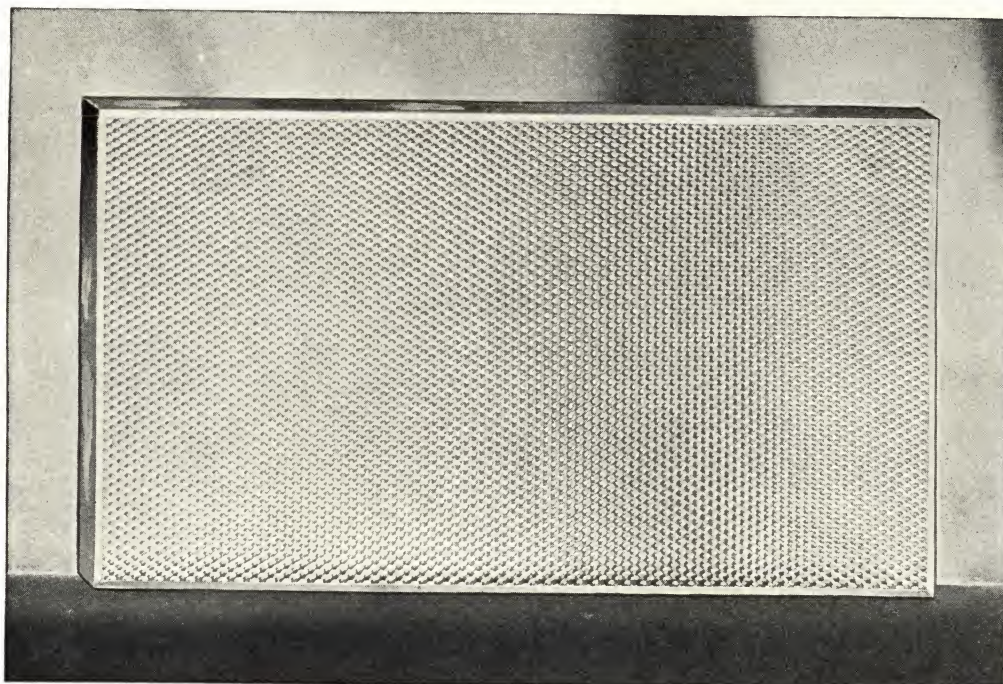
graved to reduce dirt collections and to afford easy cleaning. Specify Muralex throughout the building's interior—available both plain and wired. (See table of sizes, thicknesses, etc.)



Diffusex Glass
(Pattern Shown Actual Size)

Primarily for interior partitions, doors and transoms, but equally effective in any location where an adequate volume of softly diffused light is desired.

An attractive grouping of small and very slightly elevated lenses spaced far enough apart to avoid dirt collecting pockets and to permit easy cleaning with a moist cloth.



Industrex Glass

(Pattern Shown Actual Size)

For industrial and commercial buildings—exterior and interior openings. A compact arrangement of lens shaped figures combining effective distribution of light and attractive appearance without the

disadvantage of deeply cut grooved lines. Not a "dirt collector." Use a moist cloth to clean Industrex Glass.

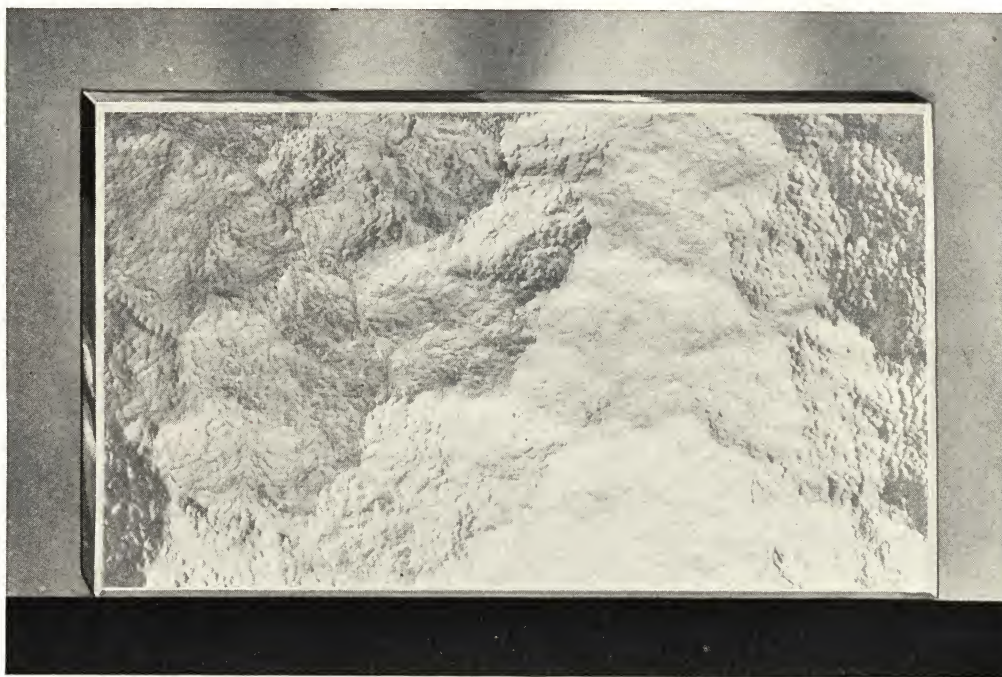


Luminex Glass

(Pattern Shown Actual Size)

Especially recommended for industrial buildings when the cost of keeping glass clean is an important factor and only medium distribution of light is

required. A relatively transparent pattern of extremely fine texture that can be glazed and cleaned like clear glass.

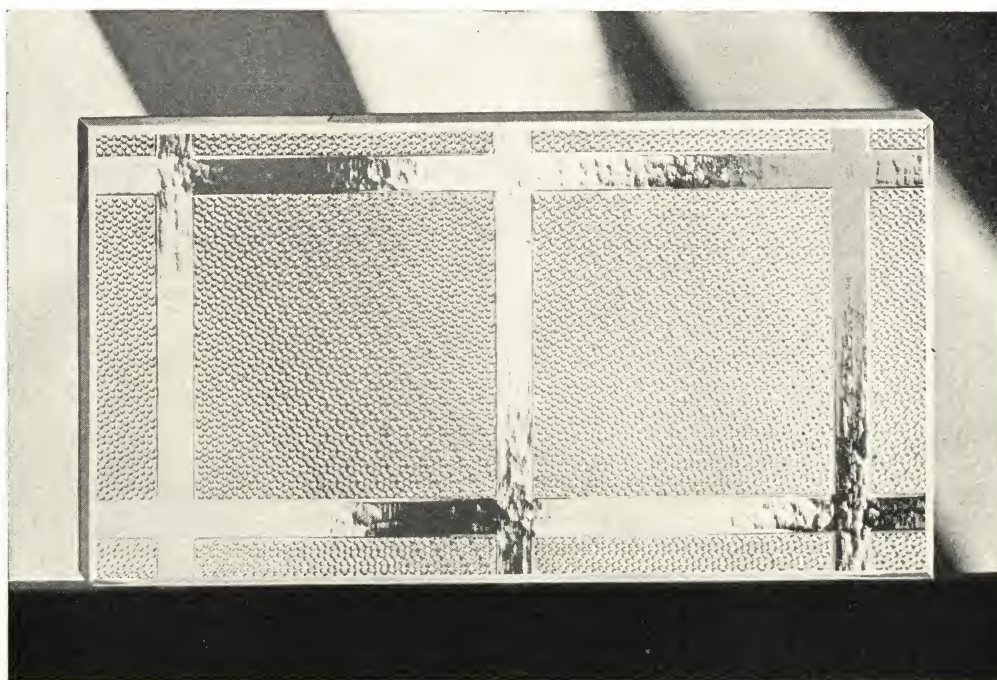


Velvex Glass

(Pattern Shown Actual Size)

A highly practical glass for skylights, factory walls and monitors but also suitable for office partitions, doors and transoms. This unique pattern is extremely shallow, yet it creates the illusion of

depth when light rays pass through the glass. An exceptionally clean glass—not totally obscure but sufficiently so for ordinary commercial and industrial building conditions.



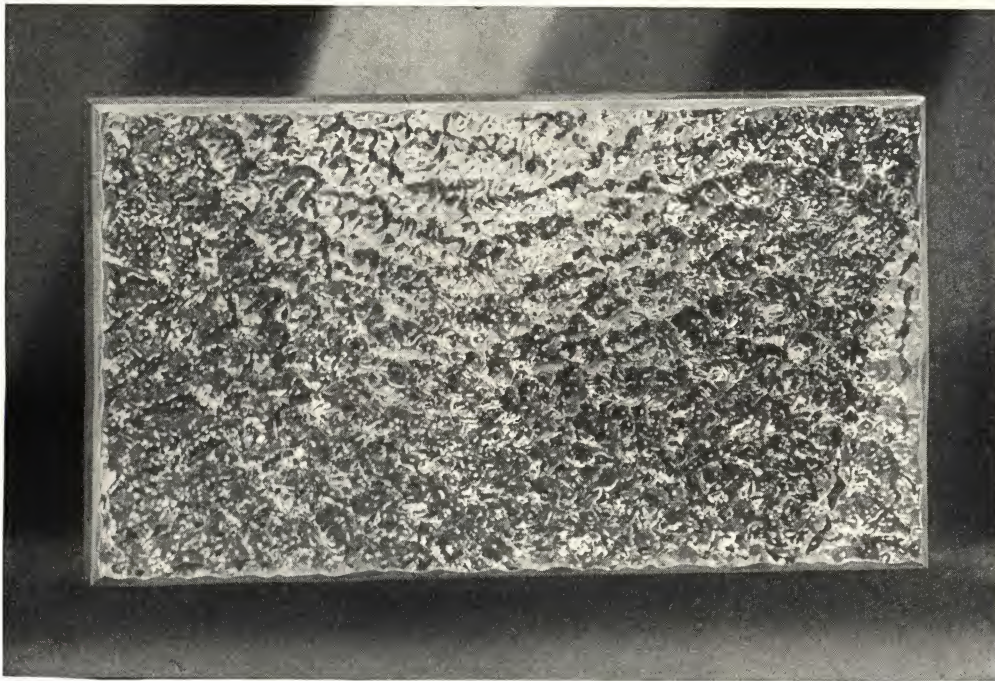
Transex Glass

Pattern Shown $\frac{1}{2}$ Size (Squares $3\frac{1}{4} \times 3\frac{1}{4}$ in., division lines $\frac{3}{8}$ in. wide)

For store front transoms. A solid sheet of glass made to resemble separate panes set in metal bars. No cemented joints to weaken under the stress of wind and rain storms.

The background pattern (Diffusex) and the smooth division lines are uniformly and but slightly

elevated without pits, grooved or sharp angles in either—hence Transex will remain clean under extremely unfavorable conditions and distribute light efficiently long after dirt collections have destroyed the effectiveness of ordinary tiled or prism transoms.



Pebblex Glass

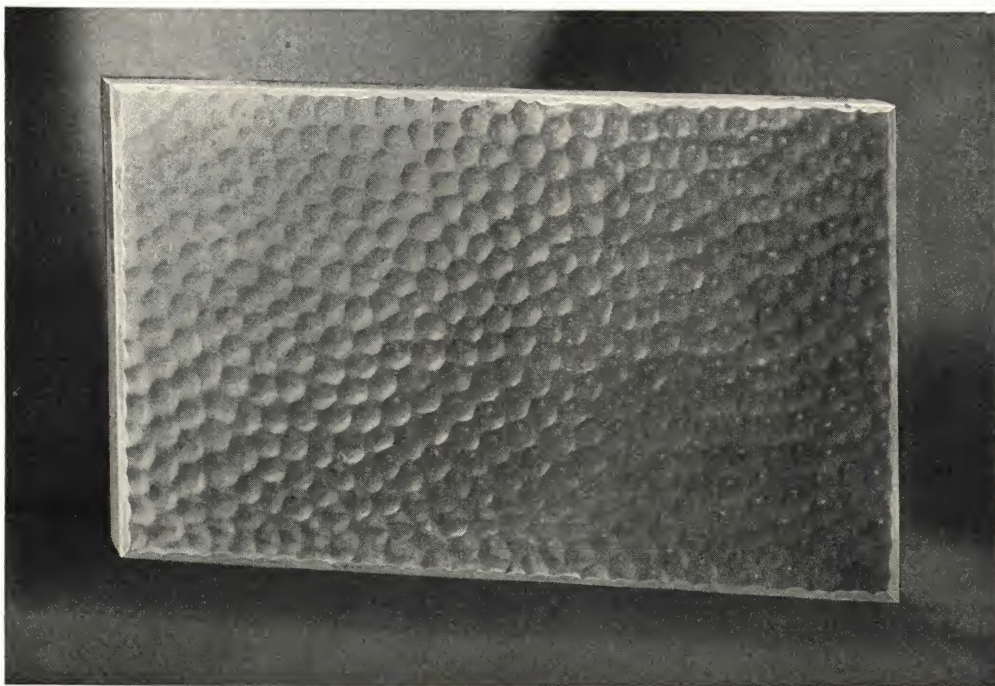
(Pattern Shown Actual Size)

An unusually brilliant and obscure glass for office building interiors; diffuses light splendidly and affords privacy within the room.

Pebblex is more deeply imprinted than some of

the newer Blue Ridge patterns such as Diffusex and Muralex.

Its attractive appearance has led many architects to specify it.



Hammered Glass

(Pattern Shown Actual Size)

For general industrial glazing—exterior and interior.

The contiguous lenses forming the pattern dis-

tribute the light passing through the glass and accentuate the brilliance of the metal. A clean glass with beauty and mechanical efficiency.

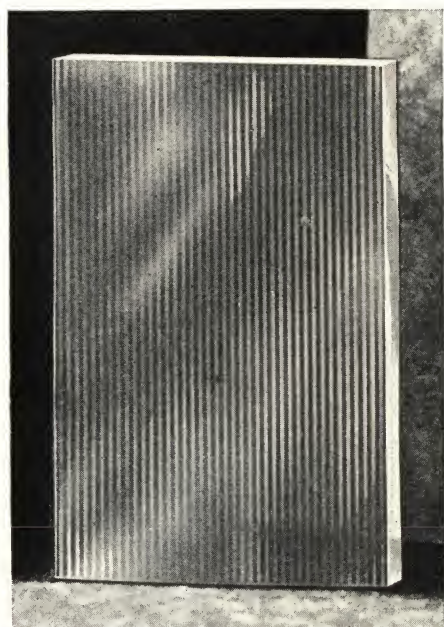
**Florex Glass**

Long a favorite for interior glazing. Its brilliance comes largely from the high quality of the glass metal as the pattern was designed under the Blue Ridge principle of avoiding sharp angular grooves and corners as far as possible.

**Mazex Glass**

Another design for building interiors; highly obscure and distributes light remarkably well. Popular for many years. Like Blue Ridge Florex, Mazex owes its brilliance to the exceptionally high quality of the metal.

Patterns
Shown
Actual
Size

**Ribbed Glass**

This glass is used for industrial glazing only. Diffuses light very well when clean but collects dirt more rapidly and is more difficult to clean than Luminex, Industrex and Velvex.

**Prism Glass**

Store front transoms are the most popular use but it deflects light rays so well that wherever it is necessary to throw light to the ceiling of a room Prism is an effective upper sash glass.

Patterns
Shown
Actual
Size



Union Guardian Building, Detroit,
Mich., Glazed with L. O. F.
Polished Plate Glass
SMITH, HINCHMAN & GRYLLS,
Architects
W. E. WOOD CO., General
Contractors



Administration Building, Chicago World's Fair, Glazed with L. O. F.
Flat Drawn Window Glass
E. H. BENNETT, H. BURNHAM and J. A. HOLABIRD, Architects
J. B. FRENCH COMPANY, Builders



A Picture Window in Living
Room of Kingsley N.
Cannon Residence at
San Francisco

IRVINE AND EBBETS, Architects
M. P. JORGENSEN, Contractor
This is an example of the effective
use of a Picture Window



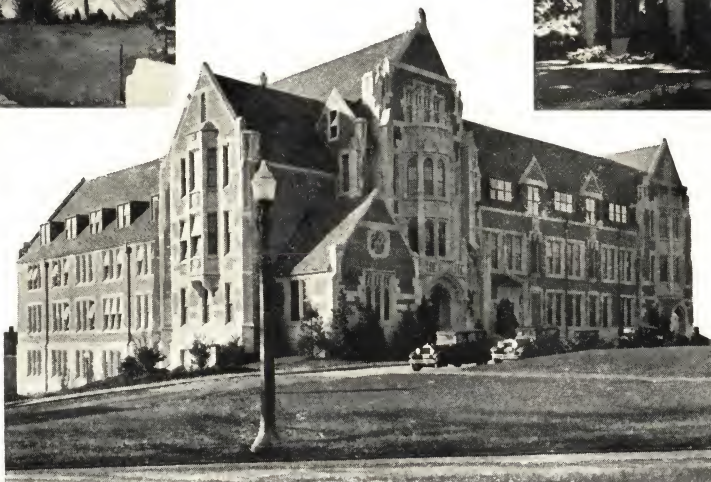
McGraw-Hill Building, New York,
Glazed with L. O. F. Polished
Plate Glass and Blue Ridge
Polished Wire Glass
HOOD, GODLEY & FOUILLOUX,
Architects
STARRETT BROTHERS & EKEN,
Builders



Home of Charles and Kathleen
Norris, Palo Alto, Cal., Glazed
with L. O. F. Double Strength
"A" Quality Flat Drawn
Window Glass
BURGE M. CLARK, Architect
WELLS P. GOODENOUGH, Builders



R. W. McKinnon Residence,
Chicago, Ill., Glazed with
L. O. F. Double Strength
"A" Quality Window
Glass
MAYO & MAYO, Architects
A. J. BROWNING, Contractor



Butterick Hall, Agnes Scott College, Atlanta, Ga., Glazed Throughout with
L. O. F. Double Strength "A" Quality Flat Drawn Window Glass

